## StormReady and TsunamiReady

#### Working Together to Save Lives

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## Why do we need StormReady?

- Approximately 90% of all Presidentially declared disasters are weather related.
- •On average there are 500 weather related deaths each year across America.
- •Severe weather causes nearly \$14 Billion in property damage annually.



## What is TsunamiReady?

- A part of the NWS StormReady Program.
- •A "grass roots" program that promotes tsunami hazard readiness.
- •A collaborative effort between federal, state, and local emergency management, and the public.
- A method to improve public safety during tsunami emergencies.



### TsunamiReady Objectives

- Create community guidelines for tsunami readiness.
- Provide Educational materials and response.
- Recognize communities that adopted TsunamiReady guidelines.
- Increase public awareness and understanding of the tsunami hazard.
- Improve pre-planning for tsunamis.

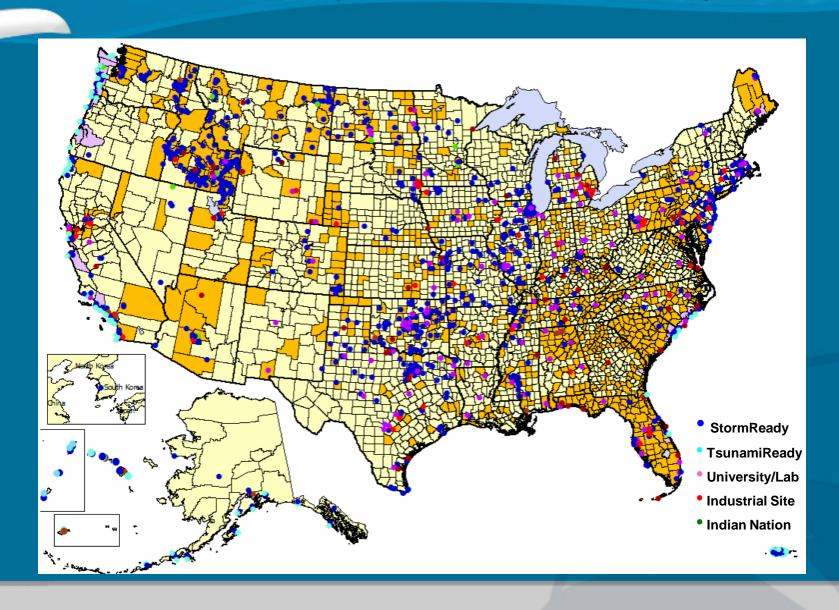


### **TsunamiReady Benefits**

- Community is more prepared "for all hazards."
- Regularly scheduled education forums.
- Increase contacts with experts (emergency managers, researchers, NWS personnel).
- Identify community readiness needs.
- Improve position to receive State/Federal funds.
- Enhance "core" infrastructure to support other community hazards.
- Allow public to see how tax dollars are being spent.



## As of February 2012 there were 2048 StormReady & 130 Tsunami Ready Sites



# How does a Community become TsunamiReady?

#### Establish Communication and Coordination Plan

- 24 Hour Warning Point
- Emergency Operations Center

#### Receive Critical Tsunami Warning Information

- NOAA Weather Radio
- NOAA Weather Wire
- Emergency Managers Weather Information Network
- News Media (Radio/TV)
- Internet
- Pagers, cell phones, etc.





### **Examples of Notification Systems**

- Use of Mass Media (Radio, Television)
- Siren Towers
- First Responders (i.e. Police, Fire, Lifeguards)
- Public Loudspeakers on building
- SMS Text Messaging WEA (Wireless Emergency Alerts)
- Emergency Telephone Call Lists (public and private sectors) – Reverse 911
- Amateur Radio
- Military Resources Helicopters and Aircraft w/ Speakers
- iNWS and NWSChat
- NWR Alert radios
- Social Media / TXDOT electronic signs

## How does a Community become TsunamiReady? (contd)

#### Disseminate Tsunami Warnings

- Emergency Alert System
- Cable Override
- NOAA Weather Radio in public buildings
- Sirens
- Other systems unique to the area



# How does a Community become TsunamiReady? (contd)

#### Increase Community Preparedness

- NWS staff provide Tsunami safety presentations
- Designate/establish tsunami area in safe zone
- Designate tsunami evacuation areas and evacuation routes, and install evacuation route signs
- Provide written, local specific, tsunami hazard response material to public
- Schools: encourage tsunami hazard curriculum, practice evacuations, and provide safety material to staff and students

## How does a Community become TsunamiReady? (contd)

#### **Administrative**

- Develop formal tsunami hazard operations plan
- Yearly meeting/discussion by emergency manager with NWS
- Visits by NWS official to community at least every other year

Emergency Operations
Plan

## Tsunami Emergency Response Concept of Operations - "End to End"

- Measured by ability to rapidly move people out of harm's way
- Require pre-event development of documents describing responses / actions
- Response Plans, Standard Operating Procedures (SOP), Checklists enable quick 24x7 action to alert communities (and conduct evacuation)

## TsunamiReady Recognition Process

- Community applies to local NWS Office.
- Local TsunamiReady Advisory Board reviews application.
- TsunamiReady Advisory Board performs on-site verification visit.
- If criteria are not met, TsunamiReady Advisory Board suggests improvements and works to implement changes.
- Once criteria are met, a recognition Ceremony and Press Conference is held for community.

### Successful Applicants Receive:

- TsunamiReady recognition letter valid for 3 years.
- •Two official TsunamiReady signs.
- Authorization to use the TsunamiReady logo.
- Instructions for acquiring additional signs.
- Information on how to notify the ISO for possible flood insurance rate adjustment (for StormReady).
- Listing on the Natl StormReady Website.



## **NWS StormReady Website**

- StormReady Main Page: Welcome to the program
- Communities: National map of StormReady communities
- How to Apply: Application process details. Application is available in WordPerfect, MS Word, PDF, and on-line formats. There's also a "Tool Kit for Emergency Managers"
- Resources/TsunamiReady: Info on TsunamiReady and ability for you to e:mail us with your best practices
- Awareness: Weather safety brochures and materials
- Publications/Photos: FAQs, brochures, ceremony photos, StormReady History
- Contact Us: State map of USA. Click on a state to get your local NWS TsunamiReady contact

### TsunamiReady Web Resources

Tsunami Information: tsunami.gov

NWS TsunamiReady Page: www.tsunamiready.noaa.gov/

NWS West Coast & Alaska Tsunami Warning Center: wcatwc.arh.noaa.gov/

NWS Pacific Tsunami Warning Center: www.prh.noaa.gov/pr/ptwc

## Thank You!



